

REMARKS

Claims 2 and 4-8 are pending in the present application.

The rejection of Claims 2, 4, and 8 under 35 U.S.C. §112, first paragraph (enablement), is obviated by amendment.

Applicants have amended Claim 2 to specifically address the Examiner's criticisms and to define the mutant α -amylase as having amylase activity and being derived from an α -amylase having an amino acid sequence represented by SEQ ID NO: 4 by substitution or deletion of at least one amino acid residue corresponding to any one of Asp₁₂₈, Gly₁₄₀, Ser₁₄₄, Arg₁₆₈, Asn₁₈₁, Glu₂₀₇, Phe₂₇₂, Ser₃₇₅, Trp₄₃₄ and Glu₄₆₆ of the amino acid sequence. In view of this amendment, Applicants submit that the Examiner's criticisms are moot and that the skilled artisan may practice the full scope of the claimed invention without undue experimentation.

Applicants request withdrawal of these grounds of rejection.

The rejections of Claims 2 and 4 under 35 U.S.C. §102(b) over Tsukamoto et al and/or Igarashi et al are obviated by amendment.

Tsukamoto et al and/or Igarashi et al fail to disclose or suggest an α -amylase having an amino acid sequence represented by SEQ ID NO: 4 which has been modified by substitution or deletion of at least one amino acid residue corresponding to any one of Asp₁₂₈, Gly₁₄₀, Ser₁₄₄, Arg₁₆₈, Asn₁₈₁, Glu₂₀₇, Phe₂₇₂, Ser₃₇₅, Trp₄₃₄ and Glu₄₆₆. Specifically, Tsukamoto et al disclose a sequence having only a 64.9% global homology to the sequence of SEQ ID NO: 4 and Igarashi et al disclose a sequence having only a 66.9% global homology

to the sequence of SEQ ID NO: 4. Therefore, Tsukamoto et al and Igarashi et al fail to disclose all the limitations of the claimed invention and, thus, cannot anticipate the same.

Withdrawal of these grounds of rejection is requested.

The rejections of: (a) Claim 4 under 35 U.S.C. §112, second paragraph, and (b) Claims 2, 4, and 8 under 35 U.S.C. §112, second paragraph, are obviated by amendment.

Applicants have amended Claims 2 and 4 to specifically address the Examiner's criticisms. It is believed that these criticisms are now moot.

Applicants request withdrawal of these grounds of rejection.

The rejection of Claims 2 and 4 under 35 U.S.C. §101 is obviated by amendment.

Consistent with the Examiner's suggestion, Claims 2 and 4 have been amended to include the term "isolated".

Withdrawal of this ground of rejection is requested.

Finally, Applicants have updated the status of the parent application on page 1 of the present application.

Applicants submit that the present application is now in condition for allowance.

Early notification of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Stephen G. Baxter, Ph.D.
Attorney of Record
Registration No. 32,884

Vincent K. Shier, Ph.D.
Registration No. 50,552

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 08/03)